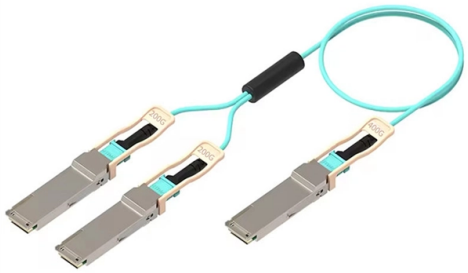
Activa Netcom & Energy Systems

Seismic Bracing Design for Norwegian Cable Trays



Overview

Technical overview of seismic cable tray design considerations including bracing splice reinforcement movement accommodation cable retention and support verification. High-seismicity projects place much greater demands on cable tray systems than ordinary installations. Before diving deeper into the specifics, it's important to understand the various factors that. Eaton's TOLCO seismic bracing solutions help protect people and non-structural components during an earthquake. Why is seismic bracing important?

International Building Code. An innovative bracing system was designed to provide lateral bracing for the cable tray system. Supports for these systems are typically sized to carry approximately a 10 ft length of conduit or duct (in the case of trapezes, ultiple pieces of conduit each approx 10 ft long). Seismic restraints, on the other hand, are normally spaced. This appendix provides the design criteria for seismic Category I cable trays and their supports.

Article Content

Test-based approach to cable tray support system analysis and design ...

This paper assimilates and reviews the various test data and conclusions for the purpose of developing a design methodology for the seismic qualification of safety-related cable tray support

Understanding Seismic Support for Electrical Installations

Key Spacing Requirements for Seismic Supports The maximum design spacing for seismic supports significantly influences the overall performance during an earthquake. For rigid cable trays, it is

Engineer certified designs and site inspections

Engineer certified designs and site inspections Ezystrut offers a range of seismic solutions that comply with Australian Standard AS1170.4. Our one-stop solution for seismic bracing, cable tray, pipe

Seismic fragility analysis of suspended cable trays in civil buildings ...

This study aims to understand the seismic fragility of typical suspended cable trays in civil buildings through full-scale shaking table tests and numerical simulation. Based on the shaking table

Westinghouse AP1000 Design Control Document Rev. 19

The AP1000 cable tray system design requires no sprayed-on material for fire protection. Cable ties are provided at spacing greater than 4 feet, thereby permitting cable movement within the trays. The

Test-based approach to cable tray support system analysis and design ...

However, no formalized design methodology or criteria were ever established to facilitate use of these test data for future evaluations. This paper assimilates and reviews the various test data

SEISMIC BRACING OF A DISTRIBUTED CABLE TRAY SYSTEM

Seismic forces for the cable trays, including the cable weights, were calculated using the nonstructural component seismic provisions of the 1994 UBC, which was the applicable design code in effect.

Seismic design and qualification of cable trays in nuclear power plants

Cable trays are light equipment components. They consist of steel ladder type cable trays and a support system. In case of horizontal cable trays, the trays are supported by cantilevers

Seismic and cable tray solution flyer

Eaton''s B-Line series cable tray with TOLCO seismic bracing is the recommended total solution for your project. Our cable tray, bolted framing, and seismic bracing are approved as one system through

Cable Tray Checklist for High-Seismicity Projects

When those elements are coordinated early, cable tray systems can perform far more reliably under earthquake demands. Planning a project in a high-seismicity region? Contact our team

Rev 7 to Procedure SAG.CP3, "Seismic Design Criteria for Cable Tray ...

The design requirements for seismic Category I structure are delineated in Regulatory Guide 1.29. This docussat provides the seismic design guideline for cable tray hangers of Comanche Peak Steam

EARTHQUAKE PROTECTION

Pipe, Cable Trays, Bus Ducts & Conduit Bracing Details Cable Bracing SWIVEL FASTENER (TYP.) SEISMIC TENSION LOAD (REACTION) STIFFENER CLAMP STIFFENER CLAMP HANGER ROD

Seismic MEP Solutions | Eaton

Seismic engineering services to help customers from pre-bid to inspection walk-through Full portfolio of seismic bracing solutions and support systems Cable tray Strut systems Pipe hangers Vibration

KINETICS™ Seismic & Wind Design Manual Section

D9.0 – Electrical Distribution Systems Title Seismic Forces Acting On Cable Trays & Conduit Basic Primer for the restraint of Cable Trays & Conduit Pros and Cons of Struts versus Cables

Performance-based optimum seismic design of cable tray system

To clarify the performance objectives of the cable tray, hanging rod, and seismic brace, as well as perform the integrated design of the cable tray system, as shown in Fig. 10, the paper

Reduction of seismic loads in cable tray hangers

In order to satisfy seismic design criteria, support system designs not rated for seismic service have been redesig- ned and rigidized through the use of larger members and/or bracing

Cable Tray and Conduit System Seismic Evaluation Guidelines

The Walkdown Guidelines and Limited Analytical Review Guidelines below are, in general, applicable to metal cable tray and conduit systems at any elevation in a plant where the nuclear plant free-field

Seismic performance sensitivity analysis to random variables for cable ...

The final results demonstrate the need to consider the effects of random variables in modeling assumption in seismic performance analyses of cable tray and can be further used in

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SEISMIC FORCES ACTING ON ELECTRICAL DISTRIBUTION SYSTEMS When subjected to an earthquake, electrical distribution systems must resist lateral and axial buckling forces, and the

Appendix 3F Cable Trays and Cable Tray Supports

This appendix provides the design criteria for seismic Category I cable trays and their supports. Seismic Category II cable trays and their supports are also designed utilizing the design criteria of this appendix.

Vogtle Electric Generating Plant (VEGP) Units 3 and 4 Updated ...

Cable Trays and Cable Tray Supports This appendix provides the design criteria for seismic Category I cable trays and their supports. Seismic Category II cable trays and their supports are also designed

Seismic MEP Solutions | Eaton

Eaton''s TOLCO seismic bracing solutions help protect people and non-structural components during an earthquake. For over 60 years, the mechanical, electrical, and fire protection trades have relied on

Contact Us

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